

# The Battle of Neighborhoods

## Amsterdam city, The Netherlands

This paper scope is covering the Capstone project - week 1 requirements, addressing:

1. the problem and background,
2. the data used for the analysis, and the methodology used.

### 3. Background discussion

A well-established restaurant chain company – the imaginary IFDR (International Flying Dutch Restaurants) - is exploring the opportunity to open a new restaurant in Amsterdam city & immediate surrounding areas of potential interest.

Amsterdam is the commercial capital of the Netherlands and one of the top financial centers in Europe. Many International Corporates have established their European headquarters in Amsterdam.

Amsterdam city metropolitan area has been selected due to its unique position as the official capital city of The Netherlands, the vibrant city life, multinational demographics, and as well a very popular destination for tourists.

Amsterdam metropolitan area has excellent public transport infrastructure, including its famous cycling paths. The city has a large variety of museums, clubs, natural, and sports centers, public markets and coffee-shops / restaurants.

Amsterdam is a relatively expensive city, very popular within the expat's community living and working in The Netherlands. Demographics will be addressed at the data section below.

Our Consultancy company has been recently engaged by IFDR to provide a Request for Proposal for an analytical project that will support decision making for the new restaurant location, considering the viable options discovered, and based on specific data and criteria discussed below.

#### 4. Problem description.

The imaginary company IFDR (International Flying Dutch Restaurants) is targeting a business expansion and as new restaurant is planned to be opened in Amsterdam. Our consultancy has been winning the RFP and granted the project to propose an optimal location for the new restaurant.

The new restaurant is planned to be of a new concept of high-quality top international cuisine that is expected to compete well within the large diversity of restaurants. However, the exact restaurant type might change, after the full analysis provides more insights based on location, demographics and spending power.

The main problem to be resolved is to find the optimal location in Amsterdam city and surroundings that would allow the business to be quickly deployed – the untapped locations.

A report with summary conclusion and recommendation will be submitted to the IFDR decision makers.

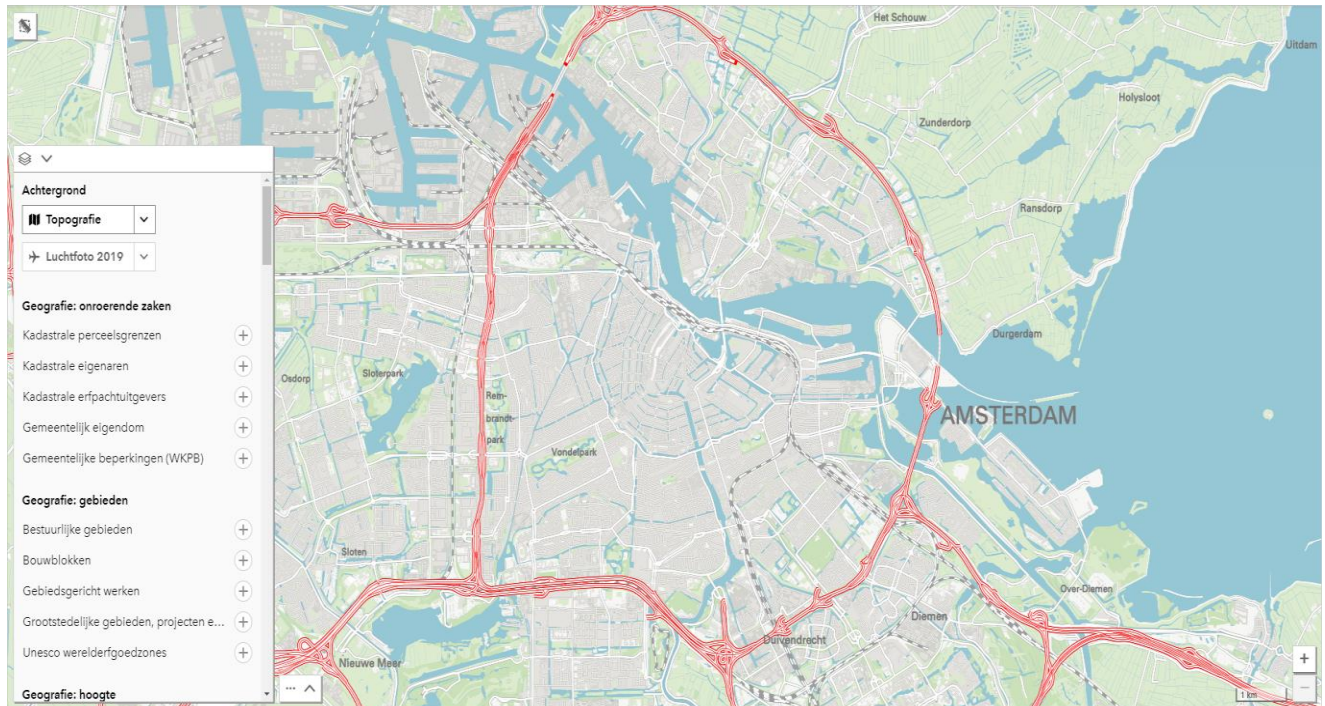
#### 5. The data used in this project

The data used for acquisition and preprocessing in this project will be open public data available from:

- [https://en.wikipedia.org/wiki/Boroughs\\_of\\_Amsterdam](https://en.wikipedia.org/wiki/Boroughs_of_Amsterdam)
- <https://en.wikipedia.org/wiki/Amsterdam>
- <https://data.amsterdam.nl>
- <https://www.europeandataportal.eu/en/news/explore-datasets-municipality-amsterdam>

We will be using Foursquare API and geopy data together with data from Amsterdam open data portal to retrieve venues information in Amsterdam Boroughs and process them using location clustering and filter / count relevant information (we are interested in restaurants locations)

Sample view from [data.amsterdam.nl](https://data.amsterdam.nl) portal under which open datasets are grouped in categories:



The dataset use for the analysis will include:

- Amsterdam boroughs / neighborhoods
- Venue type and locations (Foursquare API)
- Boroughs segmentation
- Geolocation data
- Demographics
- Cuisine types (optional) as Amsterdam is mixed international cuisine
- Supply chain availability (fresh products direct from producers)

## 6. The methodology.

We import the required data from the above sources and use Foursquare API to retrieve venues per Amsterdam Boroughs / Neighborhoods, we will perform the data preprocessing, cleaning, filtering, analysis / clustering of the venues.

We will determine the number of restaurants per location (Borough), identify potential untapped locations, and use demographics to determine the potential business value for the location.

A [week 2] report will be submitted to GitHub together with the Jupiter Notebook code used for this project.

A blog sample summary will be submitted as summary overview of the project objectives, results and conclusion.